

03050103-050**(Fishing Creek)****General Description**

Watershed 03050103-050 is located in York County and consists primarily of *Fishing Creek* and its tributaries from its origin to its confluence with Wildcat Creek. The watershed occupies 31,766 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil-Applying-Hiwassee series. The erodibility of the soil (K) averages 0.25, and the slope of the terrain averages 6%, with a range of 2-15%. Land use/land cover in the watershed includes: 61.6% forested land, 29.4% agricultural land, 6.1% urban land, 2.0% barren land, 0.5% water, and 0.4% scrub/shrub land.

Fishing Creek originates near the City of York, and this stream segment accepts drainage from Langham Branch and Hope Branch. There are a total of 47.5 stream miles and 152.2 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
CW-029	P/W	FW	FISHING CREEK AT SC 49 NE OF YORK
CW-031	BIO	FW	FISHING CREEK AT SC 161
CW-005	P/W/BIO	FW	FISHING CREEK AT S-46-347 DOWNSTREAM OF YORK WWTP
CW-225	S/INT	FW	FISHING CREEK AT S-46-503

Fishing Creek - There are four SCDHEC monitoring sites along this section of Fishing Creek. At the furthest upstream site (**CW-029**), aquatic life uses are fully supported. There is a significant decreasing trend in pH. Recreational uses are not supported at this site due to fecal coliform bacteria excursions. At the next site downstream (**CW-031**), aquatic life uses are fully supported based on macroinvertebrate community data.

Further downstream (**CW-005**), aquatic life uses are partially supported based on macroinvertebrate community data. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are not supported at this site due to fecal coliform bacteria excursions. At the furthest downstream site (**CW-225**), aquatic life uses are not supported due to occurrences of copper in excess of the aquatic life acute criterion. There is also a significant decreasing trend in dissolved oxygen concentration. There is a significant decreasing trend in pH. Recreational uses are not supported at this site due to fecal coliform bacteria excursions, which are compounded by a significant increasing trend in fecal coliform bacteria concentration.

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
FISHING CREEK CITY OF YORK/FISHING CREEK WWTP PIPE #: 001 FLOW: 2.0	SC0038156 MAJOR DOMESTIC
FISHING CREEK TRIBUTARY SUBURBAN PROPANE - TIRZAH PIPE #: 001 FLOW: 0.01	SC0046248 MINOR INDUSTRIAL (SCANA PROPANE)
HOPE BRANCH MCAFEE MHP PIPE #: 001 FLOW: 0.018	SC0027111 MINOR DOMESTIC

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME FACILITY TYPE</i>	<i>PERMIT # STATUS</i>
YORK COUNTY LANDFILL MUNICIPAL	461001-1101 (DWP-103, DWP-085, CLOSED DWP-010, 461001-1102 461001-6001)
YORK COUNTY LANDFILL C & D	461001-1201 -----
ROGERS CELLULOSIC LANDFILL CONSTRUCTION	462427-1201 (CWP-017) ACTIVE

Mining Activities

<i>MINING COMPANY MINE NAME</i>	<i>PERMIT # MINERAL</i>
ALBERT D. OLIPHANT INTERPROP 49/5 MINE	1096-91 SAND/CLAY
JULE ROGERS ROGERS SAND MINE	1265-91 SAND

Growth Potential

The majority of growth in this watershed is concentrated around the City of York. Water and sewer service are available in York and in several surrounding areas. The East York Industrial Park continues to attract new commercial development to the area. Another factor that may promote growth includes the rail lines from York to the cities of Rock Hill, Columbia, and Charlotte.

Watershed Protection and Restoration

Total Maximum Daily Loads (TMDLs)

A TMDL was developed by SCDHEC and approved by EPA for several water quality monitoring sites in the ***Fishing Creek*** watershed including CW-029, CW-005, and CW-225 to determine the maximum amount of fecal coliform bacteria they can receive from nonpoint sources and still meet water quality standards. The primary sources of fecal coliform to the sites were determined to be runoff from urban and pasture lands, failing septic systems, leaking or overflowing sanitary sewers, and livestock with uncontrolled access to streams. The TMDL states that an 84.2% reduction in fecal coliform loading from these urban and agricultural sources at monitoring site CW-029 and a 69.1% reduction at sites CW-005 and CW-225 are necessary for the streams to meet the recreational use standard. For more detailed information on TMDLs, please visit the SCDHEC's Bureau of Water homepage at <http://www.scdhec.gov/water> and click on "Watersheds and TMDLs" and then "TMDL Program".

Special Projects

TMDL Implementation for Fecal Coliform in the Fishing Creek Watershed, York County, SC

The Fishing Creek watershed lies in the north central quadrant of South Carolina and is designated as HUC 03050103-050, 060, and 070. The project was recently approved for funding under §319 and will get underway around the first of 2005. It will be implemented by a partnership of organizations including the York and Chester Soil and Water Conservation District, Clemson Extension Service, York County Government, USDA-NRCS, Chester and York County Cattlemen's Associations and Research Planning, Inc. Each partner will bring expertise to the project in order to implement the TMDL, which will reduce the load of fecal coliform bacteria in the watershed so that state water quality standards for this pollutant are met. Participants in the project will use local knowledge, sampling, and spatial data analysis to characterize sites in the watershed that have high fecal coliform loading. Best Management Practices and effective outreach activities will then be utilized to benefit water quality relative to cost on selected sites.

NPS Assessment and TMDL for Phosphorus in the Catawba River Basin

In June 2003, researchers at the University of South Carolina completed a §319-funded study of nutrient loading in the lower Catawba River basin using the WARMF (Watershed Analysis Risk Management Framework) water quality model. The model estimated that the lower Catawba (defined as the Catawba River downstream of the Lake Wylie dam and all tributaries through Lake Wateree) received an average load of 2100 kg/day of phosphorus for the 1996-1998 study period. Of this load, 46% was from point sources, 39% was from nonpoint sources, and 15% was from Lake Wylie. SCDHEC is currently using the WARMF model, which is being updated through 2003, to further refine nonpoint sources, to determine loading rates that would allow the reservoirs to meet the phosphorus standard (TMDLs), and to calculate wasteload allocations for phosphorus for the impaired reservoirs. Cooperators in the study include Catawba River stakeholders, North Carolina DWQ, and EPA Region 4.

Sustainable Environment for Quality of Life

Sustainable Environment for Quality of Life (SEQL) is a USEPA program, which addresses regional environmental planning through the Centralina Council of Governments and the Catawba Regional Council of Governments. SEQL is intended to assist local governments in the 15-county Charlotte/Gastonia/Rock Hill region to work together to promote economic growth while protecting the environment. Multiple air and water quality issues are analyzed simultaneously, while addressing transportation, water, land use, energy use, population growth and economic development. The Department has supported the program by providing air and water quality information. More information about SEQL is available at the following website: <http://centralina.org/seql/background.htm>.